



General Assembly

January Session, 2013

Raised Bill No. 564

LCO No. 2525

02525____ENV

Referred to Committee on ENVIRONMENT

Introduced by:
(ENV)

AN ACT CONCERNING MERCURY EMISSIONS AT CERTAIN POWER PLANTS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. Section 22a-199 of the general statutes is repealed and the
2 following is substituted in lieu thereof (*Effective October 1, 2013*):

3 (a) For purposes of subsections (b) and (c) of this section:

4 (1) "Affected unit" means any emissions unit that generates
5 electricity in the state and combusts coal in an amount greater than ten
6 per cent of its total heat input on a rolling twelve-month basis.

7 (2) "Alternative emissions limit" means a mercury emissions limit
8 established by the Commissioner of Energy and Environmental
9 Protection for an affected unit.

10 (3) "Calendar quarter" means the period of January first to March
11 thirty-first, inclusive, April first to June thirtieth, inclusive, July first to
12 September thirtieth, inclusive, or October first to December thirty-first,
13 inclusive.

14 (4) "Inlet conditions" means either: (A) The concentration of mercury
15 in the flue gas exiting the combustion source prior to application of
16 any air pollution control device; or (B) in the case of a fluidized bed
17 combustion unit, the concentration of mercury input to the combustion
18 source based on representative fuel sampling and analysis, as
19 determined by the Commissioner of Energy and Environmental
20 Protection.

21 (5) "Mercury" means mercury and mercury compounds in either a
22 gaseous or particulate form.

23 (6) "TBtu" means trillion BTU of heat input.

24 (7) "Fluidized bed combustion unit" means a combustion unit in
25 which fuel is introduced into a layer of solid particles kept in turbulent
26 motion by air that is forced into the layer from below, resulting in a
27 thorough mixing and intimate contact of the fuel and other reactants.

28 (b) (1) On and after July 1, 2008, the owner or operator of an affected
29 unit or units shall: (A) Meet an emissions rate of equal to or less than
30 0.6 pounds of mercury per TBtu, or (B) meet a mercury emissions rate
31 equal to a ninety per cent reduction of mercury from the measured
32 inlet conditions for the affected unit, whichever emissions rate is more
33 readily achievable by such affected unit, as determined by the owner
34 or operator of such affected unit. Compliance with the requirements of
35 this subdivision shall be demonstrated in accordance with the
36 provisions of subdivision (3) of this subsection.

37 (2) (A) If the owner or operator of any affected unit properly installs
38 and operates control technology designed to achieve the mercury
39 emissions rate requirement of subdivision (1) of this subsection and
40 such technology fails to achieve said emission rate, such owner or
41 operator shall notify the Commissioner of Energy and Environmental
42 Protection of such failure no later than February 1, 2009. Such owner or
43 operator shall submit each quarterly stack test from such affected unit
44 to the Commissioner of Energy and Environmental Protection for

45 evaluation and establishment of an alternative emissions limit for such
46 affected unit based upon the optimized performance of such properly
47 installed and operated control technology. The Commissioner of
48 Energy and Environmental Protection shall establish an alternative
49 emissions limit for any such affected unit no later than April 1, 2010.

50 (B) Upon the establishment of an alternative emissions limit for an
51 affected unit, pursuant to subparagraph (A) of this subdivision, the
52 Commissioner of Energy and Environmental Protection shall
53 incorporate such alternative emissions limit into the Title V permit for
54 such affected unit. Thereafter, upon any application for renewal of
55 such Title V permit, the Commissioner of Energy and Environmental
56 Protection shall conduct a review of such affected unit's alternative
57 emissions limit and may impose a more stringent alternative emissions
58 limit based upon any new data regarding the demonstrated control
59 capabilities of the type of control technology installed and operated at
60 such affected unit.

61 (C) If the owner or operator of any affected unit properly installs
62 and operates control technology designed to achieve the mercury
63 emissions rate requirement established in subdivision (1) of this
64 subsection, but such technology fails to achieve such emissions
65 requirement, and such owner or operator notifies the Commissioner of
66 Energy and Environmental Protection of such failure no later than
67 February 1, 2009, the owner or operator of such affected unit shall
68 demonstrate compliance with the requirements of subdivision (1) of
69 this subsection for the period beginning July 1, 2008, and ending on the
70 date of the issuance of an alternative emissions limit, pursuant to
71 subparagraph (A) of this subdivision, by operating and maintaining
72 such affected unit, including any associated air pollution control
73 equipment, in a manner consistent with good air pollution control
74 practices for the minimization of mercury emissions, as determined by
75 the Commissioner of Energy and Environmental Protection. In
76 determining whether the owner or operator of such affected unit is
77 operating and maintaining such affected unit in a manner consistent

78 with good air pollution control practices for the minimization of
79 mercury emissions, the Commissioner of Energy and Environmental
80 Protection may review the emissions monitoring results and operating
81 and maintenance procedures of such unit and may inspect such
82 affected unit.

83 (3) (A) Any stack test used to demonstrate compliance with the
84 mercury emissions rate requirements of subdivision (1) of this
85 subsection or used in the establishment or compliance with an
86 alternative emissions limit pursuant to subdivision (2) of this
87 subsection, shall be based on the average of the stack tests conducted
88 during the two most recent calendar quarters for an affected unit and
89 shall be conducted on a calendar quarter basis in accordance with the
90 Environmental Protection Agency's Method 29 for the determination
91 of metal emissions from stationary sources, as set forth in 40 CFR 60,
92 Appendix A, as amended from time to time, or any other alternative
93 method approved by the Environmental Protection Agency or the
94 Commissioner of Energy and Environmental Protection. Such stack
95 tests shall be conducted while combusting coal or coal blends that are
96 representative of the coal or coal blends combusted at such affected
97 unit during the calendar quarter represented by such stack test.

98 (B) Notwithstanding the provisions of subparagraph (A) of this
99 subdivision, any owner or operator who achieves and maintains
100 compliance with the mercury emissions rate requirement established
101 in subdivision (1) of this subsection for a period of eight consecutive
102 calendar quarters for any affected unit may reduce the frequency of
103 such stack testing for such affected unit from a once per calendar
104 quarter basis to a once per annum basis. If such annual stack testing
105 demonstrates a failure to comply with the mercury emissions rate
106 requirement established in subdivision (1) of this subsection then such
107 stack testing shall resume on a once per calendar quarter basis, as
108 described in subparagraph (A) of this subdivision.

109 [(B)] (C) If the Commissioner of Energy and Environmental

110 Protection determines that continuous emission monitors for mercury
111 in flue gases are commercially available and can perform in accordance
112 with National Institute of Technology Standards, or other
113 methodology approved by the Environmental Protection Agency, the
114 owner or operator of any affected unit shall properly install and
115 operate such continuous emission monitors and shall not be required
116 to conduct stack testing on a calendar quarter basis. When reporting
117 compliance with the mercury emissions rate requirement of
118 subdivision (1) or (2) of this subsection, as applicable, the owner or
119 operator of an affected unit shall use an average of the continuous
120 emission monitor data recorded at such affected unit during the most
121 recent calendar quarter.

122 (4) The owner or operator of any affected unit shall, for each
123 calendar quarter, report to the Commissioner of Energy and
124 Environmental Protection the results of any stack test or average of the
125 continuous emission monitor data, as applicable, used to demonstrate
126 compliance with the provisions of this subsection. Such reports shall
127 be submitted on such forms as may be prescribed by the
128 Commissioner of Energy and Environmental Protection.

129 (5) The provisions of this subsection, when implemented by the
130 Commissioner of Energy and Environmental Protection, shall not
131 suspend any underlying procedures or requirements as set forth in the
132 regulations of Connecticut state agencies.

133 (c) On or before July 1, 2012, the Commissioner of Energy and
134 Environmental Protection shall conduct a review of the mercury
135 emission limits applicable to all affected units in the state. On or after
136 July 1, 2012, the Commissioner of Energy and Environmental
137 Protection may adopt regulations, in accordance with the provisions of
138 chapter 54, imposing mercury emission limits that are more stringent
139 than such emissions requirements provided for in subparagraph (A) or
140 (B) of subdivision (1) of subsection (b) of this section.

This act shall take effect as follows and shall amend the following sections:		
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Section 1	<i>October 1, 2013</i>	22a-199
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Statement of Purpose:

To provide for annual stack testing for mercury emissions after the owner or operator of an affected unit complies with applicable mercury emission standards for a period of eight consecutive calendar quarters.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]